E&MJ METAL AND MINERAL MARKETS

WEEKLY MARKET INFORMATION ISSUED BY THE PUBLISHERS OF ENGINEERING AND MINING JOURNAL

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THIS WEEK IN THE MARKETS . . .

Threatened strike at two important Chilean copper mines postponed from April 6 to April 25. Prime Western zinc sold by Mexican producer on basis of 19½c., f.a.s. Gulf ports. Domestic zinc firm. Foreign lead unsettled.

GENERAL

The resignation of Charles E. Wilson, head of the mobilization program, over the wage dispute in the steel industry was interpreted as pointing to another general rise in costs. There is hope that a steel strike will be averted by price relief.

Second-quarter free world production of tungsten will increase 20%, IMC reports. Price trend abroad easier.

COPPER – 24½c., Valley (export 27½c.)

Interest centered in developments in Chile. Workers at Anaconda's Chuquicamata and Potrerillos mines have agreed to postpone a strike to allow more time for negotiation of a new contract. Between the threat of a work stoppage and the difficulties over a new agreement with the Chilean Government, the outlook for copper everywhere is most uncertain. IMC has reduced its allocations to the free nations for the second quarter slightly.

The British raised their selling basis for the UK £4 per long ton, effective April 1. The upward revision absorbs generally higher costs.

LEAD – 19c., N. Y. (f.a.s. Gulf 18½-19c.)

The usual monthly dip in sales has come into the market and transactions for the week declined to 6,063 tons, against 9,105 tons in the preceding week. Continued unsettlement in the foreign division tends to make buyers a little cautious. Current consumption remains high.

Receipts of lead in ore and scrap by smelters in the United States during February totaled 49,352 tons, against 42,078 tons in January and 31,222 tons in December.

Lead-base scrap is still moving in good volume.

ZINC – 19½c., East St. Louis (foreign 19½-20c.)

Interest centered in a "switching" operation involving a fair tonnage of domestic and foreign Prime Western zinc on the basis of 19½c. This brings down the price of foreign zinc to approximately the domestic ceiling, although all sellers in the foreign market have not yet recognized this figure as a general quotation on export business. European producers have been shading prices and it was reported that Belgian metal actually sold on the 19½c. basis.

Prime Western zinc continues in good demand here and producers regard the price as firm at 19½c., East St. Louis. However, there was nervousness over the possibility of a strike in the steel industry.

TIN – $1.21½, N. Y.

Bolivian producers, at meetings held during the week, held out for a higher price than that at which tin was obtained from other sources. However, a settlement is likely in the near future.

March sales of tin by RFC to domestic consumers totaled 3,820 long tons, against 3,967 tons in February. The quotation here was maintained on the basis of $1.21½.

QUICKSILVER – $207-$210, N. Y.

Traders reported a quiet market, but there was no selling pressure and quotations on spot remained unchanged. On forward metal the price could have been shaded.

SILVER – 88c., N. Y. (London 77d.)

Authorities on silver look for no marked change in the price situation. Quotations here and in London remained unchanged.

E&MJ AVERAGE PRICES – MARCH, 1952

Copper, domestic, refinery	24.200
Copper, export, refinery	27.425
Lead, common, New York	19.000
Lead, common, E. St. Louis	18.800
Silver, New York, per oz.	88.000
Silver, London, per oz.	77.000
Sterling exchange, "checks"	279.738
Zinc, Prime Western, E. St. Louis	19.500
Tin, New York, "Straits"	121.500
Tin, New York, 99%	(e)120.500
Gold, per oz., U.S. price	$35.000
Quicksilver, N.Y., per flask, 76-lb.	$207.000
Antimony, New York, boxed (d)	53.350
Antimony, bulk, f.o.b. Laredo	50.000
Antimony, boxed, f.o.b. Laredo	50.500
Platinum, refined, per oz.	$90.000
Cadmium (a)	255.000
Cadmium (b)	267.500
Cadmium (c)	280.000
Cobalt, 97% grade	240.000
Aluminum, 99%, ingot	19.000
Magnesium, ingot	24.500
Nickel (f)	56.500

(a) Average based on producers' quotation. (b) Average of producers' and platers' quotation. (c) Average of quotation on special shapes to platers. (d) Domestic, 5 tons or more but less than carload lot, boxed. (e) Price for tin contained.

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E&MJ METAL AND MINERAL MARKETS

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Analytical Standard for Metallurgical Chrome Ore

An industry standard sample for metallurgical chrome ore has recently been established through a cooperative study by several of the leading metallurgical, commercial, and chemical laboratories. The careful analysis of the ore, containing 50.96% Cr_2O_3, for chromic oxide, iron, silica, alumina, and magnesia has filled a need of the industry for a reference standard having a chromic oxide content higher than that of the chrome refractory containing 36.97% Cr_2O_3 now obtainable from the National Bureau of Standards.

Portions of the sample and copies of the analysis certificate are available without charge to industrial and commercial laboratories directly concerned with chrome ore analysis, upon application to Merton H. Davey, Andrew S. McCreath & Son, Harrisburg, Pa.

The sample was prepared by thorough mixing of a finely ground sample of Turkish chrome ore. After preliminary tests for chromic oxide and iron on several portions of the sample by two laboratories had established its uniformity, samples were distributed to the cooperating laboratories for analysis. The analyses were correlated and the analysis certificate prepared by the Research Laboratories of the Mutual Chemical Company of America, Baltimore, Maryland.

Laboratories participating in the analyses were:

Booth, Garrett, & Blair, Philadelphia, Pa.

Canadian Refractories, Ltd., Montreal, Canada.

E. J. Lavino & Co., Norristown, Pa.

Ledoux & Co., New York, N. Y.

Andrew S. McCreath & Son, Harrisburg, Pa.

Mutual Chemical Company of America, Baltimore, Md.

Ohio Ferro-Alloys Co., Philo, O., and Tacoma, Wash.

Standard Bank of South Africa, Johannesburg, Union of South Africa.

Union Carbide and Carbon Research Laboratories, Niagara Falls, N. Y.

Vanadium Corporation of America, Niagara Falls, N. Y.

Details of the preparation of the sample, and a general review of current analytical procedures and results on chrome ore, are contained in a paper which has been prepared for publication by Winslow H. Hartford, research supervisor, Mutual Chemical Company of America.

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Custom Smelters Granted Price Relief by OPS

Smelters and refiners who process copper, lead and zinc ores and concentrates for others may adjust their ceiling prices for service charges to reflect certain added costs incurred since July 1, 1951, in accordance with contracts entered into before Jan. 26, 1951, or renewed since then upon the same terms, the Office of Price Stabilization announced March 27.

Also, new contracts or contract renewals under new terms may reflect added costs incurred since July 1, 1951, but ceilings must be in line with charges in effect before Jan. 26, 1951.

Allowing increases in these service charges will have no effect upon the price of refined lead, copper, or zinc or upon the general level of prices, OPS said. The ceilings for refined metals remains subject to the General Ceiling Price Regulation (GCPR) and are unaffected by this change in the servicing charge.

Some smelters and refiners, in addition to treating ores and concentrates for their own account, conduct a custom smelting and refining service for other producers. Large tonnages are handled in this manner under long term contracts with escalator clauses to reflect any changes in cost for certain expenses involved in performing the service, such as labor, fuel and supply items. The rate of profit under such contracts is a fairly constant factor. Before today's action, these changes could not be reflected in the service charge ceiling established under GCPR.

The principal custom smelting and refining companies have been subject to substantial direct wage increases which have been made retroactive to July 1, 1951, resulting in increased costs that cannot be absorbed in the limited earnings margin provided in these long term contracts, OPS said. Today's action gives these companies price relief to cover such wage increases.

While the tonnage handled under these contracts is large, the number of contracts is relatively small and can be readily checked by OPS.

The action is covered by Supplementary Regulation 94 under GCPR, effective April 1, 1952.

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Byproduct Sulphuric Acid

Production of byproduct sulphuric acid at copper and zinc plants in 1951 totaled 825,073 tons (basis 100% acid), up 10% over 1950, the Bureau of Mines reports. Production from the sulphide ores during the last five years, in tons:

	Copper Plants (a)	Zinc Plants	Totals
1947	126,494	598,703	725,197
1948	111,967	529,478	641,445
1949	96,344	476,932	573,276
1950	131,342	609,571	740,913
1951	189,125	635,948	825,073

(a) Includes acid produced at a lead smelter. Excludes acid made from pyrites concentrates in Montana and Tennessee.

In addition to the byproduct sulphuric acid shown in the table, some of the zinc plants covered produced the following quantities from native sulphur: 1947, 266,104 tons; 1948, 233,099; 1949, 130,502; 1950, 243,743; and 1951, 261,106 tons. Sulphur consumed to make the foregoing quantities was: 1947, 93,460 tons; 1948, 80,365; 1949, 44,525; 1950, 84,249; and 1951, 88,091. No sulphur was used at copper plants that produce byproduct acid.

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Chile's Copper Production

During December, Chile produced 34,183 tons of copper, against 34,752 tons in November and 36,711 tons in October. Production in 1951 totaled 396,888 tons, which compares with 380,801 tons in 1950, the American Bureau of Metal Statistics reports.

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Vacuum Metals Corp.

The National Research Corp., Cambridge, Mass., announced the activation of its wholly-owned subsidiary, the Vacuum Metals Corp. This company was formed to undertake the commercial exploitation of developments arising from research activities in the metallurgical field. At present it will engage in the production of gas-free metals and alloys. Enlarged facilities have raised the capacity to produce these products to more than 5 tons a day.

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Harrison M. Lavender

Harrison M. Lavender, director and vice president of the Phelps Dodge Corp., died at his home in La Jolla, Calif., March 21. He was in his 62d year.

On March 1, Mr. Lavender was relieved of his duties as general manager of the company's mining division, and Charles R. Kuzell, assistant general manager, was appointed to that post.

Miscellaneous Metals

Quotations cover wholesale lots, f.o.b. New York, unless otherwise specified.

ALUMINUM—Per lb., base price, f.o.b. shipping point: 30 lb. ingot, 99% plus, 19c., in pigs, 18c.

Base prices on aluminum ingot of higher purity: 99.75%, 19½c.; 99.8%, 20c.; 99.85%, 21c.; 99.9%, 22c.

ANTIMONY—Per lb., 99½% grade:

	Domestic Boxed (a) New York	Domestic Bulk (b) Laredo
March 27	53.350	50.000
March 28	53.350	50.000
March 29	53.350	50.000
March 31	53.350	50.000
April 1	53.350	50.000
April 2	53.350	50.000

(a) Boxed (224 lb.), 10,000 lb. or more but less than carload. (b) In bulk, carload, f.o.b. Laredo; boxed one-half cent extra.

BISMUTH—Per lb., in ton lots, $2.25.

CADMIUM—Per lb., delivered.

	Commercial Sticks	Special (a) Shapes
March 27	$2.55	$2.80
March 28	2.55	2.80
March 29	2.55	2.80
March 31	2.55	2.80
April 1	2.55	2.80
April 2	2.55	2.80

(a) Special shapes to platers

CALCIUM—Per lb., in ton lots, cast in slabs and small pieces, $2.05.

CHROMIUM—Per lb., 97 percent grade, spot, $1.12; contract $1.07 per lb. (Usually sold as chrome-metal.)

COBALT—Per lb., rondelles or granules, in 500 to 600 lb. containers, $2.40; in 100 lb. containers, $2.42; less than 100 lb. containers, $2.47. Prices f.o.b. N. Y. or Niagara Falls, freight collect.

COLUMBIUM—No quotation. Pricing under prevailing conditions "subject to special terms."

GERMANIUM—Per lb. $180.

INDIUM—Per oz. troy, 99.9 percent pure, $2.25.

LITHIUM—Per lb. 98%, $9.85@$11, depending on quantity.

MAGNESIUM—Per lb., f.o.b. producer's plant, ingots (4x6 in.), 99.8 percent, carload lots, 24½c.; 100 lb. or more, l.c.l., 26½c. Extruded sticks, carload lots, 32½c.; 100 lb. or more, l.c.l. 34½c.

MANGANESE—Per lb. Minimum 96 percent Mn, maximum 2 percent iron, carload lots, bulk, 29c.; packed in cases, 35½c.

Electrolytic manganese 99.9 percent Mn, 28c., carload lots.

MOLYBDENUM—Per lb., 99 percent $3.00.

NICKEL—Per lb., electrolytic cathodes, f.o.b. Port Colborne, Ont., contract price, 56½c. U.S. import duty included. Nickel oxide sinter, 52½c. per lb. of nickel content, f.o.b. Copper Cliff.

OSMIUM—Per oz., $200, nominal.

PALLADIUM—Per oz. troy, $24.

PLATINUM—Per oz. troy, $90 on wholesale lots; $93 on sales to consumers.

QUICKSILVER—Per flask of 76 lb., $207@$210.

RADIUM—Per mg. radium content, $20@$25, as to quantity.

RHODIUM—Per oz. troy, $125.

RUTHENIUM—Per oz. troy, $90@$93.

SELENIUM—Per lb. $3.00@$3.50 for black, powdered, 99.5 percent pure.

SILICON—Per lb., minimum, 97 percent Si, maximum 1 percent Fe, crushed, carload lots, in bulk, 20c.

SODIUM—Per lb., carload lots, in drums, 16½c.; less than carload lots, 17c.

TANTALUM—Per kilo, base price, $160.60 for rod; sheet, $143. Discounts on volume business.

TELLURIUM—Per lb., $1.75.

THALLIUM—Per lb., $12.50.

TITANIUM—Per lb., 99.3% plus, $5.

TUNGSTEN—Per lb., 98.8 percent minimum 1,000 lb. lots, $6.00 Hydrogen reduced tungsten, 99.9 percent plus $7.75. Ceiling prices.

ZIRCONIUM—Per lb., powder, $7 to $8, according to quantity.

Metallic Ores

Prices in tons of 2,000 lbs., or "units" of 20 lb., unless otherwise stated.

ANTIMONY ORE—Per unit of antimony contained, 50 to 55 percent, $4.25@$4.50; 58 to 60 percent $4.50@$4.75; 60 to 65 percent, $6.25@$6.50.

BERYLLIUM ORE—Per unit of BeO contained 10 to 12% f.o.b. mine, Colorado, nominal. North Carolina, $34@$37.

Imported ore, basis 10% BeO, $36.50 per unit, c.i.f. U.S. ports.

CHROME ORE—Per long ton, dry basis, subject to penalties if guarantees are not met. f.o.b. cars New York, Philadelphia, Baltimore, etc.

Indian and Rhodesian:
48% Cr_2O_3, 3 to 1 ratio lump ..... (b)$44.00@$46.00
48% Cr_2O_3, 2.8 to 1 ratio. (b)$40.00@$42.00
48% Cr_2O_3, no ratio ..... (b)$32.00@$33.00
South African (Transvaal):
48% Cr_2O_3, no ratio ..... $34.00@$35.00
44% Cr_2O_3, no ratio ..... $27.00@$28.00
Turkish:
48% Cr_2O_3, 3 to 1 ratio, lump ..... $54@$55
Brazilian:
41% Cr_2O_3, 2.5 to 1 ratio, lump ... (a)$32.00
(a) Nominal. (b) Corrected.

COBALT ORE—Per lb. of cobalt contained, $1.35@$1.45, f.o.b. Cobalt, Ont., depending on grade.

MANGANESE ORE—Business placed during week on nearby ore within the range of prices quoted. The threat of a steel strike has caused buyers to pull out of the market on forward business. Indian ore was unchanged at $1.22 to $1.27 per long ton unit of Mn, c.i.f. U.S. ports, duty extra, basis 46 to 48% Mn, nearby positions.

On long-term contracts for ore from various sources the quotations are nominal at 90 to 95c., c.i.f. duty extra.

MOLYBDENUM ORE—Per lb. of contained MoS_2, 90% concentrate, 60c., f.o.b. mines.

TANTALUM ORE—Per lb. Ta_2O_5, $2.00@$2.25 for 56@60% concentrate.

TITANIUM ORE—Per gross ton, ilmenite, 59.5% TiO_2, f.o.b. Atlantic seaboard, $18@$20, nominal.

Rutile, per lb., minimum 94% concentrate, 5@7c., nominal.

TUNGSTEN ORE—Per short ton unit of WO_3, domestic concentrates of known good analysis, basis 60%: Ceiling price established at $65, effective April 6.

Western high grade scheelite concentrate, $65, per unit, f.o.b. mine.

North Carolina high grade concentrate, $65 per unit, f.o.b. mine.

London quotes 485s. per long ton unit or WO_3, c.i.f. U.K. ports.

VANADIUM ORE—Per lb. V_2O_5 contained, domestic, 31c., f.o.b. mine.

ZIRCON ORE (sand)—Per long ton, c.i.f. Atlantic seaboard, minimum 65 percent ZrO_2, $47@$50.

Alloys

BERYLLIUM-COPPER—Master alloy, 4 percent beryllium, remainder copper, 5 lb. ingot, $1.56 per pound of alloy; 3 oz. ingot, $2.09.

FERROCHROMIUM—Per lb. of Cr: High carbon (4 to 9%C) 65 to 69% Cr, lump, carloads, delivered Eastern zone, 21¾c.; low carbon, 30½c.

FERROCOLUMBIUM—Per lb. of Cb contained, 50@55 percent, $4.90.

FERROMANGANESE—Per gross ton, 78@82 percent, $185, seaboard.

FERROMOLYBDENUM, Etc.—Per lb. of Mo contained, f.o.b., shipping point: Ferromolybdenum, 55@65 percent Mo $1.32; calcium molybdate (CaO MoO_3), $1.15; molybdic trioxide (MoO_3), bagged, $1.13, canned, $1.14.

FERROPHOSPHORUS—Per gross ton, 18 percent P, $58.50; electrolytic, 24 percent, $75, f.o.b. Alabama and Tennessee.

FERROSILICON—Per lb. of contained Si, Eastern zone: 50% grade, 12.40c.; 75% grade, 15.60c.

FERROTITANIUM—Per lb. of Ti contained, 20 to 25% max. 0.10% carbon, $1.40.

FERROTUNGSTEN—Per lb. of W contained, 75@80 percent W, $5.00.

FERROVANADIUM—Per lb. of V contained: Open hearth, $3.00; crucible, $3.10; low-carbon and silicon, $3.20. Contract prices.

SILICOMANGANESE—Per lb. carload lots, f.o.b. shipping point, freight allowed, maximum 1½% carbon, 9.9c.

SPIEGELEISEN—Per gross ton, 19 to 21 percent grade, $75, Palmerton, Pa.

ZIRCONIUM ALLOY—12 to 15 percent Zr, 39 to 43 percent Si, 7c per lb., bulk, carload lots; 35 to 40 percent Zr, 47 to 52 percent Si 20.25c. per lb.

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From 1951 Company Reports—

Aluminium Limited

Canadian aluminum output reached a seven-year high in 1951, totaling 446,000 short tons, as against 396,000 short tons in 1950. Aluminium Limited last year had a consolidated net profit of $28,760,876 after taxes and all charges, which compares with $32,608,353 in the preceding year. Net profit per share in 1951 was $7.03, against $8.77 in 1950.

Shipments of aluminum in all forms by consolidated subsidiaries of the company totaled 434,000 metric tons, compared with 401,000 metric tons in 1950.

Distribution of Canadian aluminum in ingot form to principal markets in the last three years, in metric tons:

	1949	1950	1951
United Kingdom	146,500	133,000	181,600
United States	66,900	147,500	93,700
Canada	52,500	40,000	78,500
All others	48,100	37,800	48,900
Totals	314,000	378,300	402,700

Present contracts with the United Kingdom will call upon the company to deliver a total of 1,010,000 metric tons of aluminum ingot during the four years commencing Jan. 1, 1952. Forward sales contracts have also been entered into with a number of industrial consumers in the United States. Total deliveries contemplated by the latter contracts are 246,100 metric tons in the eight years from 1952 to 1959, with the bulk of the deliveries prior to 1957.

Two major expansion programs are being conducted in Canada, the annual report said, one in the Province of Quebec and the other in British Columbia.

The Quebec expansion program is designed to increase production at an early date to approximately 500,000 metric tons a year.

The first phase of the project in British Columbia provides for the installation of 450,000 hp of generating capacity and the construction of 83,000 metric tons of annual ingot capacity. However, the long-term objective calls for capacity for producing 500,000 metric tons of aluminum a year at the West Coast project.

First production at aluminum from the British Columbia development is scheduled for early 1954, utilizing about 300,000 hp.

Construction of new bauxite-mining facilities are proceeding in Jamaica and Los Islands of French West Africa.

U. S. Smelting Refining & Min'g

Net operating profit of U.S. Smelting Refining & Mining Co. was $3,623,583 in 1951, which compares with $1,721,024 in 1950.

Production from the company's Utah metal mines was at about the maximum rate consistent with economic operation of the properties. Substantial improvements in the handling and processing of materials at the Midvale plant have resulted in better operations and savings in costs.

All lead bullion produced at Midvale was refined at the East Chicago electrolytic refinery of the U.S.S. Lead Refinery, Inc., a wholly owned subsidiary.

The company reports progress in its long-range program of building an oil operation to supplement income derived from mining.

The following production statistics include materials recovered from custom ores but do not include bullion or other materials treated on a toll basis:

	1950	1951
Gold, oz.	202,806	180,312
Silver, oz.	2,393,998	2,729,546
Lead, tons	36,515	39,469
Zinc, tons	21,691	28,675
Copper, tons	979	1,195
Coal, tons	816,449	621,978
Oil, bbls.	60,808	188,932

In addition to the products listed, U.S. Smelting produced antimony, arsenic, cadmium, and products of lesser importance.

Inland Steel Co.

If there are no additional hostilities or work stoppages, it seems likely that as 1952 progresses steel shortages will disappear and all demands for both defense and civilian needs will be fully met, Edward L. Ryerson, chairman, and Clarence B. Randall, president, informed stockholders of Inland Steel Co.

The company continued its policy of adding to its iron ore reserves in 1951 through the purchase of a 50% stock interest in Pacific Isle Mining Co., operating mines and concentrating plants on the Mesabi Range, Minnesota. Inland entered into a long-term contract to purchase the entire production of the company. No drilling program was planned for the winter of 1951-52 at Steep Rock Lake, Ontario, as the previous years' results are being studied to determine what further exploration work is required.

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Aluminum in Japan

Output of aluminum in Japan during January totaled 3,137 metric tons, which compares with 3,052 tons in December. Consumption in January was estimated at 3,000 tons, including deliveries of 595 tons for export.

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To Buy Australian Uranium

Australian officials have accepted an offer from the U.S. Atomic Energy Commission for the sale of uranium ore from the Radium Hill field in South Australia. The price to be paid is $3.50 a lb. of U_3O_8.

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Quebec's Asbestos Output

Production of asbestos in the Province of Quebec during January totaled 75,007 tons, which compares with 64,060 tons in December and 72,171 tons in January a year ago, the Quebec Department of Mines reports.

IMC Copper Supply Off 3% in Second Quarter

The supply of copper available in the second quarter for disposal to countries in the free world will be about 3% smaller than in the first quarter of 1952, the International Materials Conference announced last week. The suggested distribution for the April-June quarter totals 723,680 metric tons, against 744,680 tons in the preceding quarter. The slight reduction resulted from an unexpected drop in output at some properties in the first-quarter period. Production is likely to increase in the second quarter.

Zinc allocations were raised from 487,650 metric tons in the first quarter to 510,145 tons in the second quarter. Zinc production in the free world is expected to increase 20,000 tons in the April-June period.

IMC's copper-lead-zinc committee said that its second quarter allocations make no provisions for stockpiling either copper or zinc.

Copper and zinc available for distribution in the second quarter under the IMC plan, by countries, in metric tons:

Country:	Copper	Zinc
Argentina	2,050	2,900
Australia	12,150	14,500
Austria	2,900	2,100
Belgium-Luxembourg	19,600	26,500
Brazil	4,700	2,200
Canada	30,600	15,000
Chile	2,250	1,100
Cuba	50	20
Denmark	3,800	1,800
Egypt	1,300	400
Finland	2,400	1,200
Formosa	70	....
France	36,900	31,500
French Africa	1,600	200
Germany, Fed. Rep. of	49,550	42,000
Greece	1,000	255
India	8,550	6,500
Indonesia	60	20
Ireland	50	100
Israel	100	100
Italy	23,800	10,500
Japan	16,000	13,000
Korea	120	....
Mexico	3,400	3,900
Netherlands	6,800	6,000
New Zealand	80	400
Norway	4,000	3,600
Pakistan	1,650	300
Peru	200	300
Philippines	....	50
Portugal	600	300
Spain	4,800	4,700
Sudan	100	....
Sweden	12,750	4,600
Switzerland	6,200	2,900
Trieste	200	....
Turkey	1,450	300
Union of South Africa	4,850	5,000
United Kingdom	97,200	67,000
United States	355,600	235,800
Uruguay	100	100
Yugoslavia	4,100	2,000
Totals	723,680	510,145

Chile, an important producer, again agreed to committee recommendations for distribution of 80% of production from its large mines. It reserved the right to dispose of the remaining tonnage as it saw fit.

•

Mount Lyell to Expand

Mount Lyell, operating at Queenstown, Tasmania, has announced a large-scale expansion program for producing copper and byproduct sulphur.

LOOKING AHEAD IN THE MARKETS

(This is a feature of the first issue of each month)

C. E. WILSON'S DEPARTURE from the post of chief mobilizer, like a stone dropped into a still pond, set a wave of rumor and speculation spreading in all directions. Here's what the wave washed up in the metal market quarter.

THERE'LL BE LESS OPPOSITION in government circles to the demands of those who favor subsidies to domestic miners, instead of higher prices for metals, as a means of increasing production. Wilson was noticeably softening in recent weeks in his stand against a price increase for copper. The metal may still go up in price one of these days, but for reasons that are only remotely connected with supply and demand for copper.

NON-FERROUS MARKET MEN were looking beyond the steel situation this week toward the time when the Mine, Mill & Smelter Workers Union would launch a drive to beat whatever wage increase is won by the CIO steelworkers. Delegates from unions holding contracts with Phelps Dodge, American Smelting, Kennecott, and Anaconda met in Denver recently and approved a drive for a 25¢ package increase.

THIS WOULD PUT MINE, MILL well beyond the Steelworkers, and, lacking price relief, it would put many high-cost producers into the red. If Mine, Mill acts as tough as its leaders talk, it will mean labor troubles this year and renewed shortages of non-ferrous metals.

METAL ALLOCATIONS continue to increase. For the third quarter, steel, copper, and aluminum allocations are up 5%, 10%, and 5%, respectively. As things look now, these allocations should be increased substantially for the fourth quarter, or even sooner.

THE HARD FACT is that business just isn't soaking up all the metal it is getting right now. This is particularly noticeable in copper, long singled out as the most critically short of the big-tonnage metals. The automobile industry isn't taking all the copper it is entitled to, not because it wants to work off inventories of high-priced metal, but because it has to work off inventories of high-priced cars.

WHAT'S AHEAD is anybody's guess, but any discussion of the outlook, however soundly on charts and statistics it may be based, must come back to this point, that the consumer holds the key. If he (that's you and me) goes out and buys things this spring, business will continue good; if he doesn't we're in for a slump. And the decisive factor in the consumer's attitude will be price.

COPPER should continue too in better supply, unless the industry is hit by strikes. Most threatening is the always-boiling situation in Chile, where nationalism, technological problems, Communist dogma, and party politics never let a mine management get a good night's sleep. A strike in Chile's copper mines would cut off about 35,000 tons of copper a month from the world's supply. Strike or no strike, there is almost certain to be some decline at least in Chile's output as negotiations drag along.

CHILE'S PRICE for copper may go higher. Unable any longer to sell at fancy prices the 20% portion of the country's output she reserves, Chile is attempting to establish a 33½¢ price for all her copper. This would just about equal the average income she used to get from both official and "unofficial" markets. There is simply nothing to indicate whether or not Chile will get her wish, but it's worth noting that a copper price increase, if it came, would come at a time when world demand is easing rather than tightening.

LEAD is in comfortable supply and the indication is that it will be for quite some time. Demand for the metal has picked up, but this reflects the belief of consumers that there will be no immediate drop in price, and that they may as well keep on buying.

STOCKPILING is in for discussion again. Having bought more than 100,000 tons of lead (from foreign sources) in recent months, the lead stockpilers must be getting somewhere within gunshot of their objective. If any more lead is bought thereafter, the basic law that put the stockpile in being will have to be changed. There's talk around Washington of using the metal stockpiles as market stabilizers, but there's no present authority in the law to permit that.

ZINC SUPPLIES should increase steadily from here on to any amount required by demand. The IMC noted recently that 20,000 tons of new zinc would be added to supplies for the third quarter. New zinc orebodies are turning up all over the world, the most outstanding being in North Africa, Tennessee, and the Pacific Northwest. Galvanizers still want more Prime Western than they can get, but diecasters have eased their demands for the higher grades of zinc. There is no indication of weakness in zinc's price, but buyers are becoming cautious just the same.

SULPHUR WILL BE SHORT right on up through 1956. Informed opinion has it that supply will fall short of demand by about 10% all through that period. This estimate avoids the possibility that the Atomic Energy Commission might go through with plans now under discussion that would use enormous quantities of acid. If the AEC goes ahead, sulphur will really be hard to get.

TITANIUM METAL INGOTS ought to be coming out of the old Basic Magnesium plant at Henderson, Nev., at a rate of 10 tons daily by the end of 1952. Using the Kroll Process, the plant now turns out about 1 ton daily of titanium sponge.

THE NEW MICA-BUYING PROGRAM, announced recently by the government, isn't likely to make anyone rich despite the fancy prices for the top grades ($70 per lb. for No. 3, good stained block). It's like the bonus for high grade uranium ores, there just isn't that kind of mica around, in any large quantity at least.

DOLLAR SHORTAGES ABROAD continue to plague those foreign consumers who would like to obtain Western Hemisphere copper, lead and zinc. This need for dollars has brought out larger offerings from abroad of antimony metal and antimony ore, tungsten ore, and various ferro alloys. The situation could change should the U.S. make funds available for foreign aid.

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E. & M. J. Weighted Index of Non-Ferrous Metal Prices

100 is composite for 1922-3-4. (Copper, Lead, Zinc, Tin, Silver, Nickel, Aluminum)

1940	79.22	1946	110.06
1941	83.49	1947	149.46
1942	86.80	1948	168.38
1943	88.74	1949	151.97
1944	88.74	1950	156.42
1945	90.86	1951	190.16

	1950	1951	1952
January	135.86	192.48	193.83
February	135.65	194.06	195.10
March	132.60	190.19	195.10
April	134.04	190.18	.....
May	142.02	189.47	.....
June	154.30	187.19	.....
July	156.40	186.46	.....
August	160.67	186.15	.....
September	172.56	186.15	.....
October	179.83	193.21	.....
November	186.00	193.17	.....
December	187.05	193.17	.....

Rolled Metals, Etc.

BRASS—Cents per lb. (base prices)

	Sheet	Wire	Rods
Yellow Brass	38.28	38.57	a 32.63
Best quality brass	39.15	39.44	38.84
Red brass 80%	39.67	39.44	38.84
Red brass 85%	40.14	39.88	39.28
Com'l bronze	41.13	40.84	40.24
Gilding metal	41.63	41.28	40.68

(a) Free cutting

CADMIUM — Per lb. Special shapes, to platers, $2.80.

COPPER — Per lb. Sheets, over 20 in. wide, 41.63c., rolls 20 in. and under, 39.71c.; Wire, bare, carload lots, f.o.b. mills 28.67@30.42c.

LEAD SHEETS — Per lb., full rolled, 140 sq. ft. 24c.

MONEL METAL — Per lb. (base prices) Standard cold-rolled sheet, 60½c.; cold-rolled strip, 63½c. Rods, hot-rolled 58½c.

NICKEL — Per lb. (base prices sheets, cold-rolled, 77c.; rods, hot-rolled, 73c.

NICKEL SILVER — Per lb., sheets, 10 percent, 49.27c.; 18 percent, 51.91c.; wire and rods, 10 percent, 51.49c.; 15 percent 54.79c.; 18 percent 57.91c.

PHOSPHOR BRONZE — Per lb., sheets, 5 percent tin, 60.20c.; wire and rods, 5 percent 60.45c.; 10 percent 67.33c.

ZINC — Per lb., carload lots, f.o.b. mill (base price): Sheet 26½c.; ribbon 25c.; plates 25½@26½., depending on size.

ZINC DIE-CASTING ALLOY — Per lb., carload lots, delivered, 23.65c. to 24.15c., is No. 3 "Zamac" grade.

•

Lead Average (Monterrey)

The net price realized by the American Smelting & Refining Co. on all of its sales of Mexican pig lead, including metal sold for consumption in Mexico, during the week ended March 22, 1952, was 18.13c. (US) per pound, f.o.b. refinery, Monterrey, Mex.

DAILY PRICES OF METALS (E & M J QUOTATIONS)

Mar.-Apr.	Electrolytic Copper: Domestic Refinery	Electrolytic Copper: Export Refinery	Straits Tin, New York	Lead: New York	Lead: St. Louis	Zinc: East St. Louis
27	24.200	27.425	121.500	19.000	18.800	19.500
28	24.200	27.425	121.500	19.000	18.800	19.500
29	No market	27.425	121.500	19.000	18.800	19.500
31	24.200	27.425	121.500	19.000	18.800	19.500
1	24.200	27.425	121.500	19.000	18.800	19.500
2	24.200	27.425	121.500	19.000	18.800	19.500
Average	24.200	27.425	121.500	19.000	18.800	19.500

Average prices for calendar week ended March 29, are: Domestic copper f.o.b. refinery, 24.200c.; export copper f.o.b. refinery 27.425c.; Straits tin, 121.500c.; New York lead, 19.000c.; St. Louis lead, 18.800c.; St. Louis zinc, 19.500c.; and silver, 88.000c.

The above quotations are our appraisal of the major United States markets, based on sales reported by producers and their agencies. They represent payments received by producers for the product. They are reduced to the basis of cash, New York or St. Louis, as noted. All prices are in cents per pound.

Copper, lead and zinc quotations are based on sales for both prompt and future deliveries; tin quotations are for prompt delivery only.

In the trade, domestic copper prices are quoted on a delivered basis; that is, delivered at consumers' plants. As delivery charges vary with the destination, the figures shown above are net prices at refineries on the Atlantic seaboard. Delivered prices in New England average 0.300c. per pound above refinery basis.

Our export quotation for copper reflects prices obtaining in the open market and is based on sales in the foreign market reduced to the f.o.b. refinery equivalent, Atlantic seaboard. On f.a.s. transactions we deduct 0.075c. for lighterage, etc., to arrive at the f.o.b. refinery quotation.

Quotations for copper are for ordinary forms of wirebars and ingot bars. Revised premiums on special shapes, effective in most instances on deliveries beginning Jan. 1, 1951, are: Standard ingots 0.125c. per pound; slabs, 0.375c. and up; cakes 0.425c. and up, depending on weight and dimensions; billets 1.33c. and up, depending on dimensions and quality. Discount on cathodes 0.125c. to 0.15c. per pound.

Quotations for zinc are for ordinary Prime Western brands. Premiums obtaining over Prime Western zinc in the East St. Louis market on the following grades, in cents per pound: Selected 0.10c.; Brass Special, 0.25c.; Intermediate, 0.5c. High Grade zinc sold on contract, delivered in the East and Middle West, commands a premium of 1.35c. per pound over the East St. Louis basis for Prime Western; on Special High Grade the premium or differential is 1.50c. per pound, effective Jan. 1, 1951.

Quotations for lead are for the common grade, and are based on sales of domestically refined metal sold to domestic consumers. The differential on sales in the Chicago district is 10 points under New York; for New England add 7½ points to the New York basis. Corroding grade commands a premium over common lead of 10 points.

Silver, Gold, and Sterling Exchange

The daily New York silver quotation reported by Handy & Harman is for silver contained in ores and other unrefined silver-bearing materials, in cents and fractions of a cent per troy ounce. It is determined by Handy & Harman on the basis of actual sales of bar silver .999 fine in amounts of 50,000 ounces or more for nearby delivery at New York as reported daily by regular suppliers, and is usually one quarter cent below the price paid for such bar silver, this reduction being allowance to such suppliers for carrying, delivering, and marketing. In addition to foreign silver, the quotation also applies to domestic silver if such silver enters the New York market.

The Treasury's purchase price of newly mined domestic silver was established at 90.5c. per troy ounce, 1000 fine, effective on July 1, 1946 under an amendment to the Silver Purchase Act of July 6, 1939.

Mar.-Apr.	Sterling Exchange "Checks"	Silver: New York	Silver: London	Gold: London
27	$2.81	88.000	77d	248s
28	2.81	88.000	77d	248s
29		Not Quoted		
31	2.81	88.000	77d	248s
1	2.81	88.000	77d	248s
2	2.81	88.000	77d	248s

Average silver, 88.000c.; Sterling Exchange 281.000c.

London silver quotations are in pence per troy ounce, basis .999 fine.

London gold quotations are per troy ounce, basis 1000 fine.

Sterling quotations represent the demand market in the forenoon.

United States Gold Price

The price paid by the United States Treasury for gold purchased by the mints continued at $35 per troy ounce of fine gold, less ¼ of 1 percent.

Actual payment by the United States Treasury for gold in imported and domestic ore or concentrate is at 99.75 percent of the price quoted by the Treasury, which at present is equal to $34.9125 per ounce.

London Standard Tin

Standard tin on the London Metal Exchange, first session, per long ton:

	Standard Tin: Spot	Standard Tin: 3-Mo.
March 27	£961	£966
March 28	£962	£968
March 31	£962	£967
April 1	£960½	£965½
April 2	£959½	£963

Tin 99%

Quotations on 99% tin (tin content), New York, were nominally as follows:

March 27th, $1.20½; 28th, $1.20½; 29th, $1.20½; 31st, $1.20½; April 1st, $1.20½; 2d, $1.20½.

Foreign Exchange

Foreign exchange rates on the Mexican peso and the Canadian dollar:

Mexico (silver peso)	11.58c.
Canada (dollar) (a)	$1.01½

(a) Selling basis, N.Y.

Official London Prices

The following delivered quotations have been fixed by the British Ministry of Metals for the United Kingdom:

	Per Long Ton: £	s.	d.
Copper: (a)			
Electrolytic, high conductivity	231	0	0
Fire refined, high conductivity	231	0	0
Fire refined, high grade	230	10	0
Fire refined, min. 99.7 percent	230	0	0
Fire refined, min. 99.2 percent	229	10	0
Lead:			
Soft, foreign duty paid	163	0	0
Soft, Empire	163	0	0
English, refined	164	10	0
Zinc:			
Foreign (G.o.b.) duty paid	190	0	0
Domestic (G.o.b.)	190	0	0
Prime Western and debased	190	0	0
Refined and electrolytic	194	0	0
Minimum 99.99 percent	196	0	0

(a) Effective April 1.

Lead-Base Scrap, 1947 to 1951

Receipts, production and consumption of lead-base scrap for the years 1947 to 1951, inclusive, in tons, according to the Bureau of Mines:

	1947	1948	1949	1950	(a)1951
Receipts of battery-lead plates	388,468	382,760	291,718	328,277	411,137
Receipts of all lead-base scrap	625,802	647,841	503,903	548,566	653,654
Receipts of tin-base scrap	6,324	6,082	4,701	5,216	6,384
Consumption of battery-lead plates	410,772	374,272	307,870	322,063	422,032
Consumption of all lead-base scrap	664,786	638,330	523,592	540,745	669,981
Consumption of tin-base scrap	6,595	5,651	4,691	5,337	6,477
Production of secondary pig, bar or ingot metals	417,355	427,294	341,822	407,765	471,607
Production of fabricated products	96,284	89,484	72,834	102,781	92,016
Production of pig, bar or ingot containing more than 50% primary metal	75,680	65,201	61,348	60,695	54,019
Total "output" of secondary lead industry (includes some primary metal)	589,319	580,979	476,204	571,241	617,642
Estimated recoverable metal content of scrap consumed	514,428	504,621	411,170	424,191	519,695
Net secondary metal recovered from purchased lead-base and tin-base scrap	513,814	504,089	411,345	426,172	516,960
Secondary metal recovered at plants producing mostly primary lead-base products	58,379	45,536	45,268	34,789	32,343
Primary metals consumed in conjunction with lead and tin scrap	79,168	80,265	66,436	146,970	103,686

(a) Preliminary.

Steel Rate at 102.1%

The operating rate of the steel industry for the week beginning March 31 was estimated at 102.1% of capacity, against 102.6% in the preceding week, the American Iron and Steel Institute reports.

The operating rate for the current week is equivalent to 2,120,000 tons of steel ingots and castings.

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Little Hope for Larger Supply of Selenium in 1952

Little improvement in the supply of selenium can be expected during the calendar year 1952, members of the Selenium Producers Industry Advisory Committee told the National Production Authority.

Selenium is a byproduct of electrolytic copper refining, and its production is largely dependent upon the production of copper. So long as there continues to be little possibility of any considerable increase in copper production, no increase in selenium can be expected.

Committee members were questioned by NPA about the feasibility of obtaining selenium from the refining of lead and zinc. They said these ores contain some selenium, but the consensus was that these ores could not at this time be considered as feasible sources.

Sufficient processing capacity is available for handling all selenium coming from copper refining, the Committee said, and production of all grades of finished selenium – high purity, commercial, and ferro – could be increased. They also said that efforts were being made to overcome losses in the processing of selenium.

Selenium was placed under control by NPA Order M-91 on December 10, 1951, with allocations based on the base period of the first six months of 1950.

Tri-State Concentrates

Joplin, Mo., March 29, 1952

Blende

	Per Ton
Prime coarse (jig and table 60% zinc)	$135.00
Flotation, 60% zinc	$135.00

Galena

Coarse and flotation, 80% lead	$245.95

●

Smelters' Copper Scrap Prices

Custom smelters' buying prices for scrap, carload lots, refinery:

No. 1 heavy copper and wire, 19¼c.; No. 2 heavy copper and wire, 17¾c.; Light copper, 16¼c.; refinery brass, 17¼c.

●

Dealers' Scrap Prices

Dealers' buying prices, f.o.b. New York or equivalent freight points, for wholesale quantities, in cents per lb.

No. 1 copper wire	18¼@19¼
Heavy copper & wire, mixed	17¼@17¾
Light copper	16@16¼
No. 1 composition	18¼@18¾
Composition turnings	17¼@17¾
Cocks and faucets	16¼@16¾
Light brass	9¼@10
Yellow brass turnings, mix.	13¼@14
Heavy yellow brass, mixed.	13¾@14¼
Auto radiators, unsweated	14¼@15
Brass pipe, cut	16@16¼
Rod brass turnings, No. 1	15@15¼
Rod ends, brass	15¼@16
New soft brass clips	17¼@18
Cast aluminum, mixed	7¼@8
Aluminum pistons, clean	7¼@8
Aluminum crankcases	7¾@8
Aluminum clips, new soft	10¼
Sheet aluminum, old clean.	8
Duralumin clips, new	8
Aluminum turnings, clean	5
Zinc die cast, mixed	6¼@7
Zinc die cast, new	8¾@9¼
Old zinc	10@10¼
New zinc clips	13¼@13¾
Soft or hard lead	15¼@16
Battery plates	9¼@9¾
Babbitt mixed	17@17¼
Linotype or stereotype	17¼@18
Electrotype	16@16¼
Solder joints close cut	21@23
Block tin pipe	1.05@1.10
No. 1 pewter	75@80
Autobearing babbitt	60@62
Monel clips, new	28@30
Monel sheet, clean	28@30
Monel turnings	25@27
Nickel clips, new	35@38
Nickel anodes, cast	35@38

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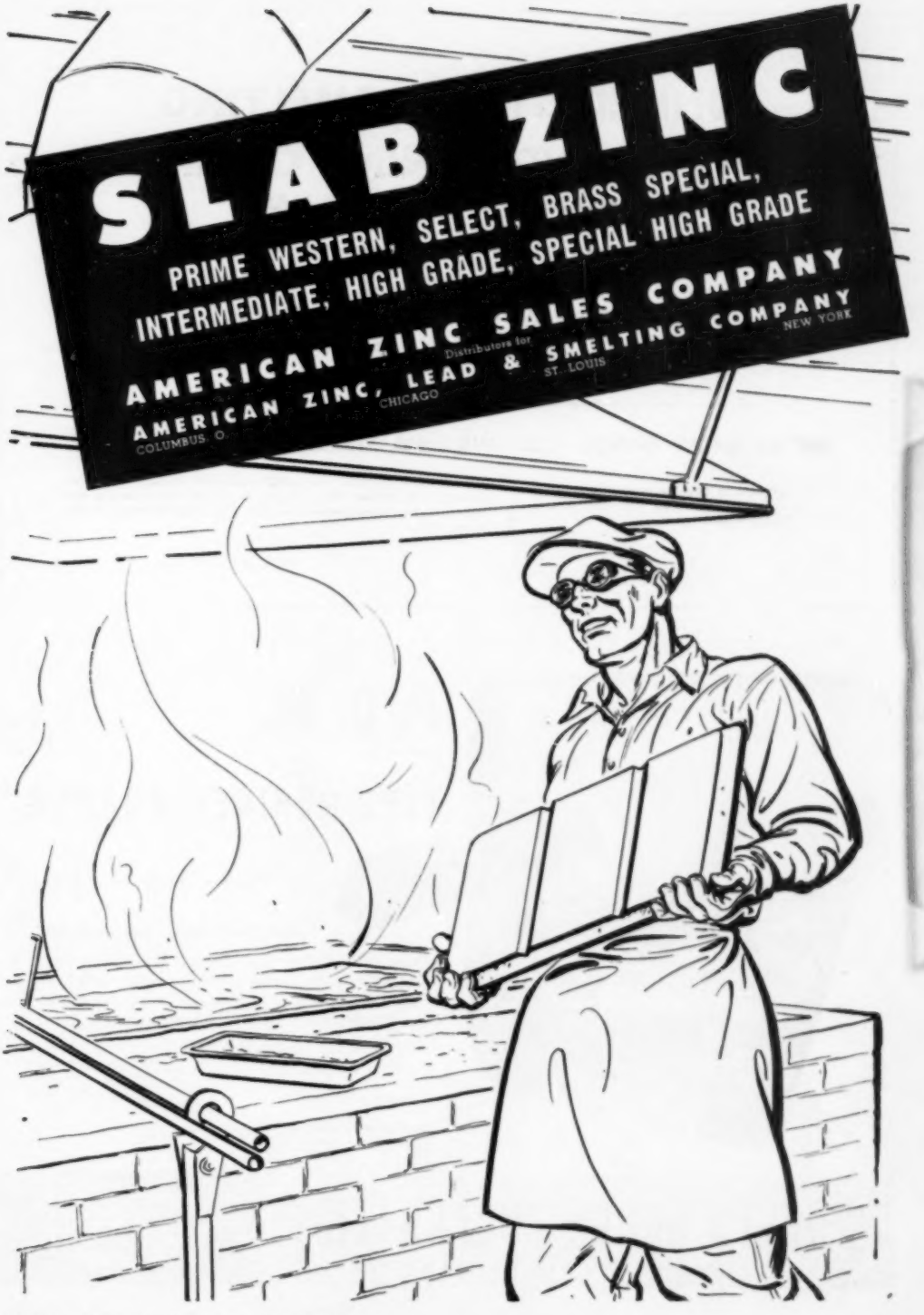
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